cut Historical Collections, 508. New Haven and Hartford. 1868.

- 2. Salices Americanae. North American Willows Disposed in Sections or Natural Groups. 1840. Spp. qto.
- 3. North American Carices. 1840. 4 octavo pages.
- 4. Supplement to the North American Carices. 1841. 1 8vo page.
- 5. Eupatoria Verticillata: specimens to illustrate the North American verticillate species and varieties of the genus Eupatorium.

 1841. 1 folio page.
- 6. List of Plants collected by Mr. E. W. Southwick on the White Mountains of New Hampshire, July 15, 1841. The Classic ii. 182–185. 1842. Also reprinted, with changed pagination, together with Southwick's Notes of a Tour to the White Hills of N. H., to which it is in the nature of an appendix.
- 7. Table to show the period and continuance of Flowering of the Apricot, Peach, Cherry and Apple at Middletown, Connecticut. . . Ann. Report of the Regents of the University of the State of New York lviii. 218–129. 1845.
- 8. Report on the Season of 1846. 1846. 14 pp. Gives tables of the time of flowering of fruit trees from 1837 to 1846 and of dates of late spring and early fall frosts, etc.
- 9. Key to the Indian Language of New England in the Etchemin or Passamaquoddy Language. derived and written from the Indian Nicola Tenesles. 1850. Spp.
- 10. Indian Proprietors of Mattabeseck and their descendants whose names appear in the town Records from 1673 to 1749. In Addresses delivered at the Dedication of the Indian Hill Cemetery, 47 50, Middletown, 1850. Reprinted in Indian Hill Cemetery: By laws, Regulations, etc. 1873.
- 11. The Indian of New England and the northeastern Provinces derived from Nicola Tenesles. 1851. 24pp.
- 12. Fossil Wonders of a former World. 1874. 7pp.

East Hartford, Connecticut.

NOTES ON RHODODENDRON.

W. W. ASHE.

Rhododendron carolinianum margarettae n. var. A-shrub in habit resembling the type. Flowers pure white, except for pale yellow spots on the upper lobe of corolla and anthers, appearing be-

¹ Rhod. 14: 97 (1912).

fore the new leaves from April 10 to May 15 in erect compact 6- to 12-flowered clusters which are from 4 to 6 cm. long; corolla rotate, scarcely two lipped, about 3 cm. wide, the narrow slightly glandularviscid tube about 5 mm. long, outside of the lobes sparingly lepidote with 3-7 rows of scales; filaments exserted, from 1.6 to 2.6 cm. long, hairy below the middle, the tips upcurved and capped by bright rose colored anthers; style with clavate stigma, much shorter than the stamens, recurved after anthesis; calyx lobes green, semicircular, fringed with scattered 2 to 3 mm. long, weak mostly caducous cilia; pedicels .5 to 2 cm. long, sparingly glandular-viscid; capsule .8 to 1.2 cm. long, lanceolate, truncate. Leaves oblong, 5 to 10 cm. long, 2 to 3 cm. wide, pointed at each end or rarely obtuse at base, dark green above, pale as if glaucous and gray lepidote beneath, petioles green or at length bright red or orange, 1 to 1.5 cm. long. This form differs from the type in its pure white flowers, filaments often villous nearly to the middle, stamens longer than the corolla, the style much shorter than the stamens and the lower surface of the leaves which as a rule are acute at both ends, usually pale and grayish or silvery lepidote.

The variety occurs in rocky woods and on cliffs, especially near small streams, between 1500 and 4000 feet altitude along the Blue Ridge in North Carolina, in McDowell and Buncombe Counties, especially above Old Fort along Curtis, Jarrett and Mill Creeks; in Rutherford County in Hickorynut Gap where abundantly associated with R. minus; and in Polk and Henderson Counties above Tryon. Type material collected by W. W. A., May 16, 1905, on the headwaters of Mill Creek and since been in cultivation. A specimen cited by Rehder as belonging to R. carolinianum, No. 4463, Biltmore Herbarium, was collected near Tryon. Two trips have been made to study this Rhododendron in this section where it is not uncommon and many plants were found in full flower. All of these had pure white flowers and this seems to be the color of all of the early flowering plants in this section and in the collection cited above.

The original station for the rose-purple form now in cultivation is the eastern face of Grandfather Mountain, North Carolina, at an altitude of about 5000 feet. It was studied there in April, 1914, when in full flower and since that date other specimens of this form have been collected at various stations in this general vicinity and a plant of it cultivated. The rose-purple form along the Blue Ridge, which is the only section where it has been possible to work out the detailed distribution, is confined to the higher altitudes above 4000 feet, growing on exposed rocks and cliffs and on such sites is frequent around the rim of the great amphitheater, which begins at Table Rock Mountain and ends at the cliffs beneath Blowing Rock embracing the rocky slopes of Grandfather Mountain. The white flowered form is not known to grow within this zone.

Beginning on Buck Creek above Marion, N. C., and from thence southward along the Blue Ridge to the headwaters of the Pacolet River the white-flowered form is common and seemingly the only early flowering form between altitudes of 1500 and 3500 feet. The white flowered form by its definite distribution and its restriction to lower altitudes seems to be sufficiently well marked to justify separating it as a variety from the rose purple-flowered plant.

Rhododendron at Lanticum Rehd. (Azalea atlantica Ashe) was described from material collected near Georgetown, S. C., in 1916. Specimens of this have recently been found in a package of plants collected near New Berne, N. C., in 1896, and also specimens of R. neglectum n. c. (Azalea neglecta Ashe, Bul. Tor. Bot. Cl. 47: 581, 1920). These early flowering azaleas which have undoubtedly been confused with Rhododendron viscosum should be looked for at other points along the Atlantic Coastal plains. Both of them grow well in cultivation at Washington, D. C. R. atlanticum has a white corolla rarely purplish in the bud and sometimes becoming purplish as it wilts, its divisions much shorter than the very viscid-pubescent funnelform tube. R. neglectum has a violet rose-colored corolla becoming whitish as it wilts, the narrow wide-spreading divisions as long as the villous, cylindrous tube, which is not glandular viscid.

DEAM'S TREES OF INDIANA (REVISED EDITION). The popular demand for Mr. Deam's first revision, which appeared in March, 1919, was so great that the edition of 1000 copies was exhausted within five days after its publication. The Conservation Commission has

Deam, Chas. C. The trees of Indiana. First Revised Edition. Publication No.
 Department of Conservation, State of Indiana, Apr. 1921. Pp 317, 134 plates.
 Reviewed in Rhodora 21: 188-191. 1919.